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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,639	08/07/2003	Jean Gilbert Boulet	Q76838	8801

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EXAMINER

THOMPSON, KENNETH L

ART UNIT PAPER NUMBER

3672

DATE MAILED: 11/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/635,639

Applicant(s)

BOULET ET AL.

Examiner

Kenn Thompson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,9,10,15 and 17 is/are rejected.
- 7) ☒ Claim(s) 2-8,11-14,16 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7Aug03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

The abstract of the disclosure is objected to because additional information such as the title of the invention should not appear on the abstract page. Correction is required. See MPEP § 608.01(b).

The specification is objected to because of the following informalities: The terms "stabiliser" and "immobilise" should be changed to "stabilizer" and "immobilize". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 9, 10, 15 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Amaudric du Chaffaut, U.S. 4,989,679.

Regarding claim 1, Amaudric du Chaffaut discloses in figures 1-10 an external element (2) for contact of the stabilizer (1) with the wall of the borehole has at least one means (28,29) for activating a means (21,22) which co-operates with the wall of the borehole in order to limit the friction between the external contact element of the stabilizer and the wall of the borehole, and that it is mounted on the central body (4) in an axial position which remains fixed at least

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within a range of values of an axial force exerted between the central body and the external contact element, the extent of which can be fixed at any value whatsoever (col. 4, lines 18-34).

As to claim 9, Amaudric du Chaffaut discloses in figure 2 at least one side of the external contact element (2) in the direction of the axis of the stabilizer, a diametrically widened part of the central body (4) with respect to a nominal diameter of the central body and of the string of drill rods (col. 3, lines 43-60).

As to claim 10, Amaudric du Chaffaut discloses in figure 2 parts of the central body (4) which have a widened diameter are of substantially spherical shape and have grooves of helical shape.

As to claim 15, Amaudric du Chaffaut discloses in that the external contact element (2) of the stabilizer (1) is rigidly joined to the central body and in particular is produced in one piece with the central body.

As to claim 17, Amaudric du Chaffaut discloses the external contact element (2) has a tubular casing (7) mounted so as to rotate on the central body (4) about the axis of the drill string and of the stabilizer and immobilized in axial translation (at 29,27,26,28) on the central body.

### ***Allowable Subject Matter***

Claims 2-8, 11-14, 16 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record does not disclose or suggest all the claimed subject matter including the means for activation consists of at least one means for mechanical coupling in rotation between the external casing and the central body of the drill rod, when the external casing is displaced axially relative to the body in the direction of the axis under the effect of forces exerted between the blade of the casing and the wall of the borehole, the casing being retained in a position in which it is freely rotatable on the body about the axis by resilient means for restoring in the direction of the axis which bear by two axial ends on edges perpendicular to the axis both of the central body and of the external casing of the stabilizer and constitute abutments for precise positioning of the external casing relative to the central body of the stabilizer in such a way that resilient restoring means are both compressed simultaneously by displacement of the external casing towards a position of coupling to at least one means for mechanical coupling in rotation.

The prior art of record does not disclose or suggest all the claimed subject matter including the means for activation consisting of a drilling liquid circulating in the direction of the axis of the stabilizer in an annular space between the wall of the borehole and the external surface of the stabilizer, the inter-blade space having the shape of a Venturi in the direction of the axis and of the circulation of the drilling liquid in such a way as to create an effect of a liquid bearing following the blades of the contact element of the stabilizer.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Langer et al., U.S. 4,984,633 discloses a similar helical arrangement.

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Schuh, U.S. 5,931,239 discloses a controllable axial positioning means.

Antle, U.S. 3,370,657 and Criley, U.S. 1,824,466 disclose a similar spring arrangement.

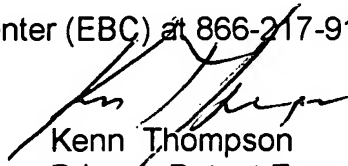
Genevois et al., U.S. 6,702,042 discloses a similar stabilizer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenn Thompson whose telephone number is 703 306-5760. The examiner can normally be reached on 7:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J Bagnell can be reached on 703 308-2151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

12 November 2004

  
Kenn Thompson  
Primary Patent Examiner  
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